

### **REMARKS**

In response to the final Office Action mailed August 31, 2007, Applicant submits this Amendment accompanied by a Request for Continued Examination (RCE). As a result of this Amendment, claims 1-4 and 6-28 are pending. Claims 1, 8, and 9 are amended, and new claims 25-28 have been added for examination on the merits.

Upon the electronic submission of this paper, Applicant's representative authorized a charge to Deposit Account No. 13-2855 covering the RCE fee and the extra claims fees. No additional fees are believed to be necessary for the proper entry and consideration of this Amendment. Nevertheless, if the Office deems otherwise, kindly charge any costs thereof to Deposit Account No. 13-2855, Order No. 30810/39676A.

In light of the foregoing amendments to the claims and the following remarks, Applicant believes that the present application is in condition for allowance and respectfully requests the Examiner to acknowledge the same.

### **EXAMINER INTERVIEW**

Applicant thanks Examiners Dixon and Yu for the courtesies extended during the telephonic interview, which was conducted on October 2, 2007, with Applicant's representatives Michael Furmanek and Roger Heppermann.

During the interview, Applicant's representatives expressed that the Office Action seems to address claim limitations that are conspicuously absent from Applicant's own pending claims. For example, the Office Action alleges that claim 1 recites "a means adapted to generate a signal that is adapted to advise a wearer whether the gas emerging from [sic] said filter system has insufficient oxygen to be safely breathable and comprises at least 19.5% oxygen." Such limitations, however, are not recited in any of Applicant's pending claims. The Examiner indicated that the Office Action was copied from an Office Action recently issued in connection with U.S. Patent Application No. 10/393,246, which allegedly claims similar although not identical subject matter. Accordingly, Applicant's representatives asserted that the Office Action is improper and the rejections should be withdrawn. The Examiner disagreed and stated that although the limitations may not be present in Applicant's claims, the same rejections are applicable to the present case. The Examiner refused to withdraw the rejections.

Next, during the interview, German Patent No. DE 195 03 027 to Mucha was discussed, as it applies to claim 1 of the present application. While no agreement was reached during the interview, Applicant has now amended the claims to more positively recite the subject matter of the present application.

### **REJECTIONS UNDER 35 U.S.C. §103**

Claims 1-4, 6-22 stand rejected under 35 U.S.C. §103 as allegedly obvious over Mucha (DE 195 03 027) in view of at least one of Hilton et al. (EP 0 241 188 A1), Kanwsiher et al. ('098), Bartels & Rieger (DE 3 512 644), and Hubner ('518).

A *prima facie* case of obviousness requires that three basic criteria be met. First, there must be some suggestion or motivation, either in the references themselves or in knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference or references, when combined, must teach or suggest all of the claim limitations. *See* M.P.E.P. §2143.

Applicant submits that such criteria have not been satisfied, and that each of the claims of the present application are allowable over the cited references, taken alone or in combination.

Initially, as amended, independent claims 1 and 9 of the present application recite a breathing apparatus having a tank for supplying pressurized air during a clean air mode, a filter system for supplying ambient air during a filtered mode, a valve assembly, and a switch selectively enabling switching between the clean air mode and the filtered mode. The valve assembly comprises a first valve associated with the tank and a second valve associated with the filter system, and is adapted to control the flow of pressurized air from the tank such that the pressurized air opens the first valve and closes the second valve to actuate the valve assembly from the filtered mode to the clean air mode while continuously providing a supply of breathable air to the user.

None of the references of record teach such combination of features, either alone or in combination.

*The Mucha Reference*

For example, Mucha teaches a breathing system with a compressed air cylinder 9, a filter system 7,8, and a controller 12. The controller 12 is adapted to receive a signal from a sensor 10 when contamination levels reach some threshold. Upon receiving the signal 10, the controller 12 actuates a reversing valve 4, which switches the air supplied to the user from the filter system 7, 8 to the compressed air cylinder 9. The system of Mucha is not configured such that the pressurized air from the compressed air cylinder opens the first valve and closes the second valve of the valve assembly, as recited in amended claims 1 and 9. On the contrary, Mucha merely includes a valve assembly, which includes one of a variety of embodiments of a single valve, as illustrated in Figs. 2, 3, 5, and 6. Such valves are neither opened nor closed by the pressurized air supplied from the tank, but rather, by the controller 12 via a control element 13. Moreover, upon switching between the filter mode and the tank mode, the system inherently includes a moment of dead-time, where the user is not provided any breathable air. Accordingly, Mucha also fails to disclose a valve assembly that is actuated from one mode to another while continuously providing a supply of breathable air to the user, as recited in claims 1 and 9.

*The Hilton Reference*

Similarly, Hilton fails to disclose these features. Hilton discloses a breathing system that primarily operates in a filtered air mode, and includes a back up compressed air tank. The back-up compressed air tank only supplies air to the user when the filter becomes clogged, or under extreme breathing conditions, for example, such that the pressure in the mask worn by the user drops below some threshold. As stated by Hilton, such back-up supply should only last for a fraction of a second. Column 5, lines 47-50. The Hilton system does not include a switch, and therefore the user cannot selectively switch from filtered supply to compressed air supply. Moreover, when the filter becomes clogged, the reduction of air pressure in the mask, which results from a reduction in pressure supplied from the filter, also causes the valve 12, which communicates with the filter, to close. Therefore, it is a reduction in pressure from the filter that closes the valve 12, and not the pressure from the tank.

Accordingly, the system disclosed by Hilton does not include a valve assembly comprising a first valve associated with the compressed air cylinder and a second valve

associated with the filter system, wherein pressurized air from the cylinder opens the first valve and closes the second valve, as recited in amended claims 1 and 9. Moreover, as mentioned, the system of Hilton does not include a switch selectively enabling switching between the clean air mode and the filtered mode. Hilton merely includes a valve that automatically opens to supply compressed air to the facemask when the pressure in the face mask from the filter decreases. Such a valve does not amount to a switch, as recited in the claims of the present application.

The remaining references run so far astray from the claimed subject matter that a specific discussion of each is not warranted.

*Combination of Mucha and Hilton -- Improper*

Additionally, Applicant submits that any combination of Mucha and Hilton is improper because there is no motivation to combine the same. Mucha provides a system that can be switched by a controller between a filtered system and a compressed air system. Either system can be used for prolonged periods of time. Hilton provides a system that only automatically provides a user with compressed air as a back-up, and only for a fraction of a second, for example. There is no suggestion to substitute, modify, or otherwise combine the very disparate teachings of these two references.

For example, any modification of Hilton to include a switch would change the principle of operation thereof and render the system inoperable for its intended purpose of automatically providing compressed air to the user *only* as a temporary back-up to the filter system when the filter system cannot provide sufficient pressure to the user. A person having ordinary skill in the art would not look to a temporary back-up system, such as that disclosed by Hilton, to solve a problem associated with a switchable system, such as that disclosed by Mucha, or vice versa. Accordingly, common sense dictates that the claimed invention is not obvious over Mucha, Hilton, or any other reference of record.

In light of the foregoing, Applicant respectfully requests reconsideration and withdrawal of the outstanding obviousness rejections.

### **NEW CLAIMS**

New claims 25-28 have been added herein. Applicants submit that claims 25-28 are dependent on one of allowable claims 1 and 9, and as such, are also in condition for allowance.

### **CONCLUSION**

In view of the foregoing, Applicant submits that each of the outstanding objections, rejections, and/or other concerns have been either accommodated, traversed, or rendered moot, thereby placing the present application in condition for allowance. If there are any outstanding issues that the Examiner believes may be remedied via telephone conference, Applicant invites the Examiner to telephone the undersigned at (312) 474-6300.

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Respectfully submitted,

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